Eastern Metropolitan Region
Palliative Care Consortium

Consortium Clinical Group

End of life care: management of respiratory secretions

June 2013

Guideline Review Due: June 2016.

Background:

Terminal respiratory secretions (known as 'death rattle' or 'noisy breathing') are often observed in an imminently dying person. Despite the symptom occurring in 23 - 92% of patients (1) there is a lack of robust research to guide assessment or management. The cause of terminal respiratory secretions is unproven, but it is considered to be due to a pooling of respiratory secretions that occurs as a person becomes weaker, loses consciousness and the ability to cough or swallow normally (2). Family members can express concern that terminal respiratory secretions may be distressing to the patient and they require ongoing support and education.

Rattle Intensity Score (6) A scoring tool may be used in clinical documentation

0	Not audible
1	Only audible near patient
2	Clearly audible at the end of the patients bed in a quiet room
3	Clearly audible at a distance of about 9.5m in a quiet room

Key points to remember

- The 'death rattle' is a strong predictor of death – after the death rattle commences, median survival is 23 hours. (3)
- The literature search conducted for these guidelines showed no anti-secretory medication to be consistently better than another.
- Recent evidence from a single placebo controlled trial suggests that medication is no better than a placebo (4,5). More studies are needed to investigate this further.
- Providing quality care and support to the patient's family is critical, including bereavement care.
- Mouth care and position changes will maximise patient comfort.
- Clinical experience shows suctioning can be "very uncomfortable for the patient and cause significant...distress" (9). If suctioning is needed, gentle oral suctioning only maybe appropriate.
- Implement the management flow chart (p3) when the symptom is detected.
- Medication is not always required.
- Regularly assess the patient's clinical situation and response to any medication administered.

Guidelines for initiating medication:

1) Identify "death rattle" as soon as it starts. Medications are most effective when started at a rattle score of 1 (see scoring tool above) (3)
2) Assess the hydration of the mouth as medication may exacerbate dryness.
3) Continue pharmaceutical treatment for 24 hours. Effectiveness improves with time (3)
4) If sedation is required consider using drugs which are tertiary amines (Atropine and Hyoscine Hydrobromide/Hyoscine™) (3, 5)
5) Drug selection & prescribing is based on the differing pharmacological profiles, prescriber preference, accessibility and the cost of medication. (8)

Abbreviations used in the flow chart: mg = milligrams

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The patient is dying with noisy respiratory secretions ("death rattle")

GENERAL APPROACH

Patient care:

- Nurse the person on their side, reposition to other side every 3-4 hours.
- Elevate the head of the bed slightly, retain a position of comfort
- Provide frequent mouth care (every 1-2 hours).
- Use background music or a fan to diffuse the sound

Family care:

- Explain how & why noisy secretions develop, emphasising it is a normal part of the dying process.
- Give reassurance that the noise & secretions are not distressing for the patient
- Provide the EMRPCC family leaflet on this symptom or other appropriate supportive literature.

Are the noisy secretions still problematic?

No → Continue with the general approach

Yes

Maintain the general approach (as above).

Any of the following drugs (listed alphabetically) are suitable for subcutaneous administration, depending on availability & preference

- Atropine 0.4 - 0.6mg stat [7] or
- Glycopyrrolate 0.2mg stat [7] or
- Hysocine Butylbromide (Buscopan) 20mg stat [7] or
- Hysocine Hydrobromide (Hyoscine) 0.4mg stat [7]

Has it been effective?

Yes

- Maintain the general approach as outlined above.
- Repeat subcutaneous dose in 4-6 hours as needed.

If ongoing doses of medication are required then consider using a continuous subcutaneous infusion of the effective drug.

- Atropine 1.2 - 2.4 mg /24 hours [11]
- Glycopyrrolate 0.6 - 1.2 mg /24 hours [7]
- Hyoscine Butylbromide (Buscopan) 60 - 80 mg /24 hours [7]
- Hyoscine Hydrobromide (Hyoscine) 0.8 - 2.4mg /24 hours [7, 10]

No

- Provide ongoing support to family, reiterating it is a part of the dying process and not distressing for the patient.
- Continue with the general approach (as outlined above).
- An alternate drug or dose may be used but is unlikely to relieve the noise.
- Address the grief and bereavement needs of carers & family.

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DISCLAIMER

This document is to be printed in colour in its entirety.
The information contained in this document is to be used as a guideline only. It is the responsibility of the user to ensure information is used correctly.
These guidelines reflect current Australian/Victorian palliative care practice and available literature at the time of release. Printed versions can only be considered up to date for a period of one month from the printing date, after which the latest version should be downloaded from the Eastern Metropolitan Region Palliative Care Consortium website. Follow your organisation's policy and procedures regarding management of respiratory secretions and end of life care.

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